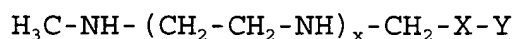Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (original): A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-X-Y$$

wherein x is an integer of about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

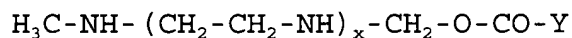Claim 2 (original): The composition of matter of claim 1 wherein x is about 581.

Claim 3 (original): The composition of matter of claim 1 wherein X is -O-CO-.

Claim 4 (original): The composition of matter of claim 1 wherein Y is a cholesterol residue.

Claim 5 (original): The composition of matter of claim 1 wherein Y is a member selected from the group consisting of

residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α-ergostenol, β-ergostenol, γ-ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1-sitosterol, β-sitosterol, γ-sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.
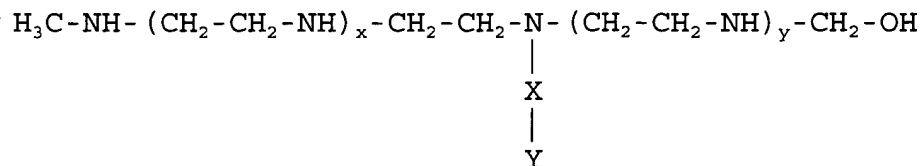
Claim 6 (original): A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-O-CO-Y$$

wherein x is an integer of about 8 to about 1,200, and Y is a cholesterol residue.

Claim 7 (original): The composition of matter of claim 6 wherein x is about 581.

Claim 8 (original): A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-OH$$
$$|$$
$$X$$
$$|$$
$$Y$$

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

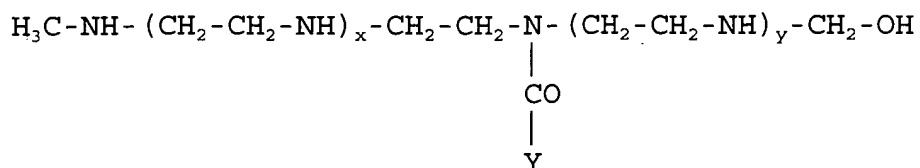Claim 9 (original): The composition of matter of claim 8 wherein x + y is about 581.

Claim 10 (original):   The composition of matter of claim 8 wherein X is -CO-.

Claim 11 (original):   The composition of matter of claim 8 wherein Y is a cholesterol residue.

Claim 12 (original):   The composition of matter of claim 8 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α-ergostenol, β-ergostenol, γ-ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1-sitosterol, β-sitosterol, γ-sitosterol, lumisterol,

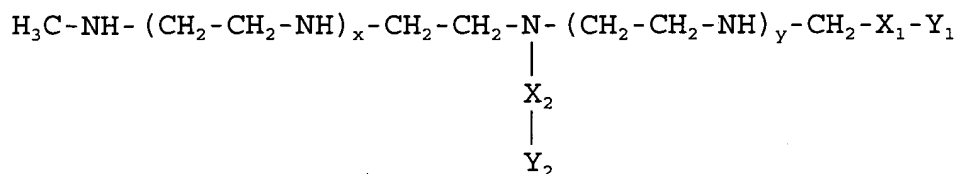pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and

dehydroergosterol.

Claim 13 (original):   A composition of matter having a

formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-OH$$
$$|$$
$$CO$$
$$|$$
$$Y$$

wherein x is an integer of about 0 to about 1,200, y is an integer

of about 0 to about 1,200, with the proviso that x + y is about 8

to about 1,200, and Y is a cholesterol residue.

Claim 14 (original):   The composition of matter of claim 13

wherein x + y is about 581.

Claim 15 (original):   A composition of matter having a

formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-X_1-Y_1$$
$$|$$
$$X_2$$
$$|$$
$$Y_2$$

wherein x is an integer of about 0 to about 1,200, y is an integer

of about 0 to about 1,200, with the proviso that x + y is about 8

to about 1,200, X_1 and X_2 are linkers, and Y_1 and Y_2 are residues of

a sterol comprising a 3-ol group.

Claim 16 (original):   The composition of matter of claim 15
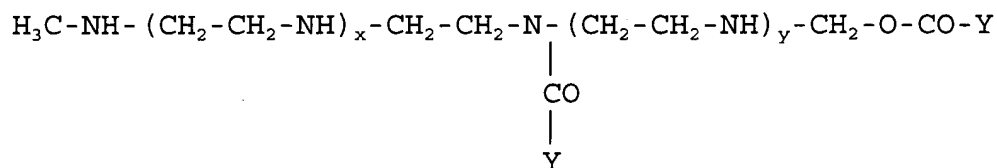
wherein x + y is about 581.

Claim 17 (original):   The composition of matter of claim 15

wherein X_1 is -O-CO- and X_2 is -CO-.

Claim 18 (original):   The composition of matter of claim 15

wherein Y_1 and Y_2 are cholesterol residues.

Claim 19 (original):   The composition of matter of claim 15

wherein Y_1 and Y_2 are members independently selected from the group

consisting of residues of cholesterol, cholestanol, coprosterol,

epicholestanol, epicholesterol, ergostanol, α-ergostenol, β-

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ergostenol, γ-ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1-sitosterol, β-sitosterol, γ-sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 20 (original):   A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-O-CO-Y$$
$$|$$
$$CO$$
$$|$$
$$Y$$

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, and Y is a cholesterol residue.

Claim 21 (original):   A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-X-Y$$
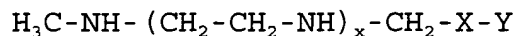
wherein x is an integer of about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 22 (original): The complex of claim 21 wherein x is about 581.

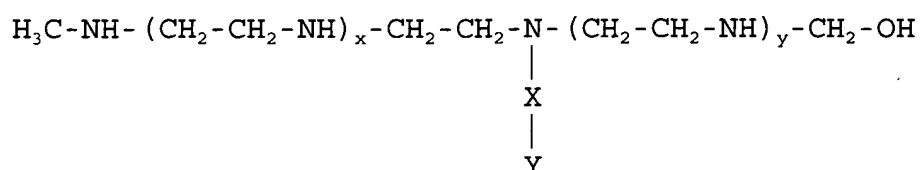Claim 23 (original): The complex of claim 21 wherein X is -O-CO-.

Claim 24 (original): The complex of claim 21 wherein Y is a cholesterol residue.

Claim 25 (original): The complex of claim 21 wherein X is -O-CO- and Y is a cholesterol residue.

Claim 26 (original): The complex of claim 21 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α-ergostenol, β-ergostenol, γ-ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1-sitosterol, β-sitosterol, γ-sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 27 (original):   The complex of claim 21 wherein the nucleic acid comprises a plasmid.

Claim 28 (original):   A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by:

$$H_3C\text{-}NH\text{-}(CH_2\text{-}CH_2\text{-}NH)_x\text{-}CH_2\text{-}CH_2\text{-}N\text{-}(CH_2\text{-}CH_2\text{-}NH)_y\text{-}CH_2\text{-}OH$$
$$|$$
$$X$$
$$|$$
$$Y$$

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 29 (original):   The complex of claim 28 wherein x + y is about 581.

Claim 30 (original):   The complex of claim 28 wherein X is -CO-.

Claim 31 (original):   The complex of claim 28 wherein Y is a cholesterol residue.


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Claim 32 (original):   The complex of claim 28 wherein X is -CO- and Y is a cholesterol residue.

Claim 33 (original):   The complex of claim 28 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α-ergostenol, β-ergostenol, γ-ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1-sitosterol, β-sitosterol, γ-sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 34 (original):   The complex of claim 28 wherein the nucleic acid comprises a plasmid.

Claim 34 (original):   A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-X_1-Y_1$$
$$\underset{\displaystyle Y_2}{\overset{\displaystyle X_2}{\vert}}$$
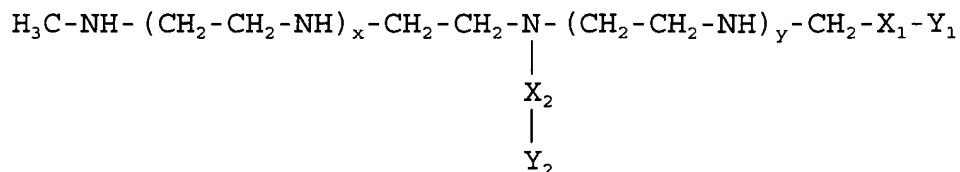
wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X_1 and X_2 are linkers, and Y_1 and Y_2 are residues of a sterol comprising a 3-ol group.

Claim 35 (original):   The complex of claim 34 wherein x + y is about 581.

Claim 36 (original):   The complex of claim 34 wherein X_1 is -O-CO- and X_2 is -CO-.

Claim 37 (original):   The complex of claim 34 wherein Y_1 and Y_2 are cholesterol residues.

Claim 38 (original):   The complex of claim 34 wherein X_1 is -O-CO-, X_2 is -CO-, and Y_1 and Y_2 are cholesterol residues.

Claim 39 (original):   The complex of claim 34 wherein Y_1 and Y_2 are members independently selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α-ergostenol, β-ergostenol, γ-ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol,

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allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol,

campesterol, α_1-sitosterol, β-sitosterol, γ-sitosterol, lumisterol,

pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and

dehydroergosterol.

Claim 40 (original): The complex of claim 34 wherein the

nucleic acid comprises a plasmid.

Claims 41-52 (canceled)